Flood Control Project Maintenance

2015 Structure Summary Report

Overall Unit and Item Ratings

Reclamation District No. 2096 Wetherbee Lake

Wetherbee Lake Pumping Plant & Navigation Gate

erall Unit Rating	Rated Item	Item Rating
M	Operating Log	Α
	Operation & Maintenance Manual	А
	Plant Building	А
	Communications	А
	Safety	М
	Cranes	N
	Pumps	Α
	Power	Α
	Motors, Engines, Fans & Gear Reducers	A
	Pump Control Systems	A
	Sumps/Wet Well	A
	Trash Racks	M
	Trash Rakes	N
	Sluice / Slide Gates	N
	Electric Gate Operators	A
	Manual Gate Operators	U
	Other Metallic Items	А
	Flap Gates	A
	Closure Structures	А
	Security Fencing	А
	Intake and Discharge Pipes	А

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Flood Control Project Maintenance

Unit Cover Sheet

2015 Pumping Plant Inspection Results

Reclamation District No. 2096 Wetherbee Lake

Pumping Plant
Wetherbee Lake Pumping Plant & Navigation Gate

Pumping Plant Rating	M
Date of Inspection	07/23/2015
DWR Inspector	Maksim Khashchuk
Accompanied By	Randy Barker RD-2096 Wetherbee Lake

Levee Inspection Report By Mile - Structure 2015

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/23/2015 07/23/2015	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.		1	
LM End	0.00	Issue Type +	Ma	Location *			
Category	tions	GPS Latitude/Longitude					
Calegory	legory			Start		End	
Item	Operating Log			37.7738	64 °	37.773864°	
item					27 °	-121.298427 °	
DWR ID DWR_RD2096_56_t _ 2012_1							
Action/Comments							

Inspector Comments: O&M log presented at time of inspection



View of the Operating Log and O&M Manual.

No Photos

LM Start	0.00	Rating **	Α	Issue No.		2			
LM End	0.00	Issue Type +	Ма	Location *					
Category Pump Stations				GPS Latitude/Longitude					
Calegory			Start		End				
Item	Operation & Maintenance			37.77386	4 °	37.773864 °			
Item	Manual	Manual			0 °	-121.298430 °			
DWR ID DWR_RD2096_56_t _ 2012_2									
		Action/Comments							

Inspector Comments: O&M manual was present at time of inspection. LMA is in proecees of creating posted operating instructions at pump station.

LM Start	0.00	Rating **	Α	Issue No.		3		
LM End	0.00	Issue Type +	Ма	Location *				
Category Pump Stations				GPS Latitude/Longitude				
Category	gory		Start			End		
Item	Plant Buil	ding		37.77386	64 °	37.773864	0	
пеш				-121.29843	30°	-121.298430	0	
DWR ID	DWR_RD2	096_56_t _ 201	2_3					
		Action/	Commer	nts				

Inspector Comments: Building protects the controls only.

Photo 1 of 1: ST_2015_RD2096_56_3_20150709_00002.jpg



View of the pumping facility and navigation gate.

* Location LS : Land Side CR : Crown

: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Structure 2015

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/23/2015 07/23/2015	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.		4		
LM End	0.00	Issue Type +	Ma	Location *				
Category Pump Stations				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Communications			37.77386	64 °	37.773864 °		
пеш					° 0	-121.298430 °		
DWR ID DWR_RD2096_56_t _ 2012_4								
	Action/Comments							

Inspector Comments: Trustee has cellular phone.

No Photos

Rating ** Issue No. LM Start 0.00 5 Issue Type + 0.00 Ма Location * LM End Pump Stations GPS Latitude/Longitude Category Start End Safety 37.773864° 37.773864° Item -121.298430° -121.298430 ° DWR ID DWR_RD2096_56_t _ 2012_5

Action/Comments

Inspector Comments: Missing guard rail on navigation canal. Missing fire extiguisher.



View of the missing guard rail.

LM Start	0.00	Rating **	N	Issue No.		6	
LM End	0.00	Issue Type +	Ма	Location *			
Category	Category Pump Stations			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Cranes		37.7738	64 °	37.773864	0	
item				-121.2984	30°	-121.298430	0
DWR ID DWR_RD2096_56_t _ 2012_6							
	Action/Comments						

Inspector Comments: Item does not apply, cranes are not present on site.

No Photos

* Location

LS: Land Side

WS: Water Side

CR: Crown

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Structure 2015

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/23/2015 07/23/2015	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.		7
LM End	0.00	Issue Type +	Ма	Location *		
Category Pump Stations			GPS Latitude/Longitude			
Calegory						End
Item	Pumps			37.7738	64 °	37.773864
пеш				-121.2984	30°	-121.298430 °
DWR ID DWR_RD2096_56_t _ 2012_7						
Action/Comments						

Inspector Comments: Pumps appear to be in working order.

No Photos

Rating ** Issue No. LM Start 0.00 Α Issue Type + 0.00 Ма Location * LM End Pump Stations GPS Latitude/Longitude Category Start End Power 37.773864° 37.773864° Item -121.298430° -121.298430 ° DWR ID DWR_RD2096_56_t _ 2012_8

Action/Comments

Inspector Comments: No electrical deficiencies observed. Backup generators can be brought in on an emergency basis.

No Photos

LM Start	0.00	Rating **	Α	Issue No.	10		
LM End	0.00	Issue Type +	Ма	Location *			
Category Pump Stations				GPS Latitude/Longitude			
Category			Start		End		
Item	Motors, Engines, Fans & Gear			37.77386	4°	37.773864°	
пеш	Reducers		-121.29843	o°	-121.298430 °		
DWR ID	DWR_RD2	096_56_t _ 201					
Action/Comments							

Inspector Comments: All items appear operational.



View of the pump motors.

* Location LS : Land Side CR : Crown

: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Structure 2015

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/23/2015 07/23/2015	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.	11		
LM End	0.00	Issue Type +	Ma	Location *			
Category Pump Stations			GPS Latitude/Longitude				
Calegory				Start		End	
Itom	ltem Pump Control Systems			37.77386	1°	37.773864	
пеш				-121.29843	°	-121.298430	
DWR ID	DWR_RD2096_56_t _ 2012_11					,	
	Action/Comments						

Inspector Comments: Controls are free of damage and appear to operate normally.

No Photos

LM Start	0.00	Rating **	Α	Issue No.		12
LM End	0.00	Issue Type +	Ma	Location *		
Category Pump Stations			GPS Latitude/Longitude			
Calegory			Start		End	
Item	Sumps/Wet Well			37.7738	64 °	37.773864°
item			-121.2984	30°	-121.298430 °	
DWR ID	DWR_RD2096_56_t _ 2012_12					·

Action/Comments

Inspector Comments: Sump is clear of debris.



View of the pump intake system. Note the missing grate at top left corner.

LM Start	0.00	Rating **	М	Issue No.	13		
LM End	0.00	Issue Type +	Ma	Location *			
Category Pump Stations			GPS Latitude/Longitude				
Calegory				Start		End	
Trash Racks			37.7738	64 °	37.773864	0	
item				-121.2984	30°	-121.298430	0
DWR ID	DWR_RD2			'			
Action/Comments							

Inspector Comments: Trash rack is present, however one panel is missing from rack.



Section of trash rack is missing, missing section would be in upper left of photo.

* Location LS : Land Side WS: Water Side CR : Crown

: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Structure 2015

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/23/2015 07/23/2015	Maksim Khashchuk

LM Start	0.00	Rating **	N	Issue No.	14		
LM End	0.00	Issue Type +	Ma	Location *			
Category Pump Stations			GPS La	titud	le/Longitude		
Calegory	Category			Start		End	
Item	Trash Rakes			37.77386	64 °	37.773864 °	
item				-121.29843	30°	-121.298430 °	
DWR ID	DWR_RD2096_56_t _ 2012_14						
Action/Comments							
Inspector (Inspector Comments: No trash rake present.						

No Photos

Rating ** Issue No. LM Start 0.00 Ν 15 Issue Type + 0.00 Ма Location * LM End Pump Stations GPS Latitude/Longitude Category Start End Sluice / Slide Gates 37.773864° 37.773864° Item -121.298430° -121.298430 ° DWR_RD2096_56_t _ 2012_15 DWR ID Action/Comments

No Photos

Inspector Comments: No slide gates present

LM Start	0.00	Rating **	Α	Issue No.	16		
LM End	0.00	Issue Type +	Ma	Location *			
Category Pump Stations			GPS Latitude/Longitude				
Category				Start		End	
Item	Electric Gate Operators			37.7738	64 °	37.773864 °	
пеш			-121.2984	30°	-121.298430 °		
DWR ID	DWR_RD2096_56_t _ 2012_16						
Action/Comments							

Inspector Comments: Item appears to be in good working condition. Radial arm gate was open at time of inspection.

Photo 1 of 2: ST_2015_RD2096_56_16_20150814_00017.jpg



View of the radial arm gate in the open position.

* Location LS : Land Side CR : Crown

: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Structure 2015

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/23/2015 07/23/2015	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.		16 (cont)	
LM End	0.00	Issue Type +	Ma	Location *			
Category Pump Stations			GPS La	de/Longitude			
Calegory			Start		End		
Item	Electric Gate Operators			37.7738	64 °	37.773864 °	
пеш			-121.2984	30°	-121.298430 °		
DWR ID	DWR_RD2096_56_t _ 2012_16						
	Action/Comments						

Inspector Comments: Item appears to be in good working condition. Radial arm gate was open at time of inspection.



View of the gate controls.

ue Type + S	Ма	Location * GPS La	ıtitud	lo/Longitudo
S		GPS La	titud	lo/Longitudo
			ilituo	ie/Longitude
				End
Manual Gate Operators			64 °	37.773864 °
			30°	-121.298430 °
DWR_RD2096_56_t _ 2012_17				
	•	'	-121.29843	Operators 37.773864 ° -121.298430 °

Action/Comments

Inspector Comments: Manual gate operators could not be engaged to test the functionality of the system.



View of the manual gate operation control.

LM Start	0.00	Rating **	Α	Issue No.	18		
LM End	0.00	Issue Type +	Ма	Location *			
Category	Pump Sta	tions		GPS La	titud	le/Longitude	
Category				Start		End	
Item	Other Metallic Items			37.77386	64 °	37.773864	0
item				-121.29843	30 °	-121.298430	0
DWR ID	DWR_RD2						
Action/Comments							

Inspector Comments: Other exposed metal items are painted or coated to prevent corrosion.

No Photos

* Location

LS: Land Side

WS: Water Side

CR: Crown

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Structure 2015

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/23/2015 07/23/2015	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.	19		
LM End	0.00	Issue Type +	Ma	Location *			
Category Pump Stations				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Flap Gate	S		37.77386	64 °	37.773864 °	
item				-121.29843	30°	-121.298430 °	
DWR ID DWR_RD2096_56_t _ 2012_19							
Action/Comments							

Inspector Comments: Flap gates appear to be fully operational.



View of the flapgates.

LM Start	0.00	Rating **	Α	Issue No.		20	
LM End	0.00	Issue Type +	Ma	Location *			
Category Pump Stations			GPS Latitude/Longitude				
Calegory			Start		End		
Closure Structures			37.7738	64 °	37.773864°		
iteiii				-121.2984	30°	-121.298430 °	
DWR ID	DWR ID DWR_RD2096_56_t _ 2012_20						
A ation / Common anto							

Action/Comments

Inspector Comments: Radial arm gate acts as closure structure, gate was open at time of inspection.



Radial arm gate, shown in open position.

LM Start	0.00	Rating **	Α	Issue No.		21	
LM End	0.00	Issue Type +	Ма	Location *			
Category Pump Stations				GPS Latitude/Longitude			
Calegory		Start		End			
Item	Security Fencing			37.7738	64 °	37.773864	0
item				-121.2984	30°	-121.298430	0
DWR ID DWR_RD2096_56_t _ 2012_21							
Action/Comments							

Inspector Comments: Security fencing is in place. Closed circuit cameras are also in place.



View of the security fencing around the facility.

* Location

LS : Land Side

WS : Water Side

CR : Crown

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W: Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Structure 2015

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/23/2015 07/23/2015	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.		22	
LM End	0.00	Issue Type +	Ma	Location *			
Category Pump Stations				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Intake and Discharge Pipes			37.7738	64 °	37.773864 °	
пеш				-121.2984	30°	-121.298430 °	
DWR ID DWR_RD2096_56_t _ 2012_22							
Action/Comments							
Inspector (Inspector Comments: Pipes appear to be free of defects.						

Photo 1 of 1: ST_2015_RD2096_56_22_20150814_00023.jpg

View of the siphon breakers at the levee crown.

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement